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INFORMATION DISCLOSURE **STATEMENT** Patent Application Docket No. UF-375 Serial No. 10/602,394

SEP 0 2 2003 Margaret H. Erfron, Patent Attorney

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

(not yet assigned)

Applicant(s)

Carrie Haskell-Luevano

Serial No.

10/602,394

Filed

June 23, 2003

Conf. No.

(not yet assigned)

For

Novel Melanocortin Receptor Templates, Peptides, and Use Thereof

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Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §§1.97 AND 1.98

Sir:

In accordance with 37 C.F.R. §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. Copies of the cited documents are enclosed.

The applicant respectfully asserts that the substantive provisions of 37 C.F.R. §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,

Margaret H. Efron Patent Attorney

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MHE/ba

Attachments: Form PTO/SB/08 (3 pages) and references listed thereon (32 refs.).

PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO

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of

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Con	Complete if Known		
Application Number	10/602,394		
Filing Date	June 23, 2003		
First Named Inventor	Carrie Haskell-Luevano		
Art Unit	(not yet assigned)		
Examiner Name	(not yet assigned)		
Attorney Docket Number	UF-375		

				U.S. PATENT DO	CUMENTS	
Examiner Initials*	Cite No. 1	Document N Number - Kind known	Code ² (if	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U1	US- 6,127,381		10-03-2000	Basu et al.	All
	U2	US- 6,451,783	B1	09-17-2002	Hadcock et al.	All
	U3	US-				
	U4	US-				
	U5	US-				
	U6	US-				
	U7	US-				
	U8	US-				
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	U19	US-				
	U20	US-				

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. 1	Country C	Foreign Patent Docu		(if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	F1	WO	01/74844	Ÿ	A2	10-11-2001	F. Hoffmann-La Roche Ag	All	
	F2	wo	02/18437	¥	A2	03-07-2002	F. Hoffmann-La Roche Ag	All	
	F3	WO	03/006620		A2	01-23-2003	Palatin Technologies, Inc.	All	
	F4	WO	99/21571		A1	05-06-1999	Trega Biosciences, Inc.	All	
	F5	wo	99/54358		A1	10-28-1999	Quadrant Holdings Cambridge Limited	All	
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	F9					<u> </u>			
	F10								<u> </u>

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PTO/SB/08B (10-01)

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Application Number June 23, 2003 Filing Date First Named Inventor Carrie Haskell-Luevano **Group Art Unit** (not yet assigned) (not yet assigned) **Examiner Name** UF-375 **Attorney Docket Number**

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
	R1	BOLIN, K.A. et al. "NMR Structure of a Minimized Human Agouti Related Protein Prepared by Total Chemical Synthesis" FEBS Letters, 1999, pp. 125-131, Vol. 451.				
	R2	CASTRUCCI, A.M.L. et al. "α-Melanotropin: The Minimal Active Sequence in the Lizard Skin Bioassay" General and Comparitive Endocrinology, 1989, pp. 157-163, Vol. 73.				
	R3	HRUBY, V.J. et al. "α-Melanotropin: The Minimal Active Sequence in the Frog Skin Bioassay" J. Med. Chem., 1987, pp. 2126-2130, Vol. 30.				
	R4	HOLDER, J. R. et al. "Structure-Activity Relationships of the Melanocortin Tetrapeptide Ac-His-DPhe-Arg-Trp-NH ₂ at the Mouse Melanocortin Receptors. 1. Modifications at the His Position" <i>J. Med. Chem.</i> , 2002, pp. 2801-2810, Vol. 45.				
	R5	HOLDER, J. R. et al. "Structure-Activity Relationships of the Melanocortin Tetrapeptide Ac-His-DPhe-Arg-Trp-NH ₂ at the Mouse Melanocortin Receptors: Part 2 Modifications at the Phe Position" <i>J. Med. Chem.</i> , 2002, pp. 3073-3081, Vol. 45.				
	R6	JACKSON, P. J. et al. "Design, Pharmacology, and NMR Structure of a Minimized Cystine Knot with Agouti-Related Protein Activity" <i>Biochemistry</i> , 2002, pp.7565-7572, Vol. 41. No. 24.	_			
	R7	KAVARANA, M. J. et al. "Novel Cyclic Templates of α-MSH Give Highly Selective and Potent Antagonists/ Agonists for Human Melanocortin-3/4 Receptors" J. Med. Chem., 2002, pp. 2644-2650, Vol. 45.				
	R8	KIEFER, L. L. et al. "Melanocortin Receptor Binding Determinants in the Agouti Protein" Biochemistry, 1998, pp. 991-997, Vol. 37.				
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	R10	KIM et al., "Hypothalamic Localization of the Feeding Effect of Agouti-Related Peptide and α-Melanocyte-Stimulating Hormone," <i>Diabetes</i> , February 2000, pp. 177-182, Vol. 49.				
	R11	HASKELL-LUEVANO, C. et al. "Characterization of Melanocortin NDP-MSH Agonist Fragments at the Mouse Central and Peripheral Melanocortin Receptors" J. Med. Chem., 2001, pp. 2247-2252, Vol. 44.				
	R12	HASKELL-LUEVANO, C. et al. "The Agouti-Related Protein Decapeptide (Yc[CRFFNAFC]Y) Possesses Agonist Activity at the Murine Melanocortin-1 Receptor" Peptides, 2000, pp. 683-689, Vol. 21.				
	R13	HASKELL-LUEVANO, C. et al. "Structure Activity Studies of the Melanocortin-4 Receptor by in Vitro Mutagenesis: Identification of Agouti-Related Protein (AGRP), Melanocortin Agonist and Synthetic Peptide Antagonist Interaction Determinants" <i>Biochemistry</i> , 2001, pp. 6164-6179, Vol. 40.				

Examiner	Date
Signature	Considered

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Sheet	3	of	3

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	R14	McNulty, J. C. et al. "High-Resolution NMR Structure of the Chemically-Synthesized Melanocortin Receptor Binding Domain AGRP(87-132) of the Agouti-Related Protein" <i>Biochemistry</i> , 2001, pp. 15520-15527. Vol. 40.				
	R15	AL-OBEIDI, F. et al. "Potent and Prolonged Acting Cyclic Lactam Analogues of α-Melanotropin: Design Based on Molecular Dynamics" J. Med. Chem. 1989, pp. 2555-2561, Vol. 32.				
	R16	OOSTEROM, J. et al. "Common Requirements for Melanocortin-4 Receptor Selectivity of Structurally Unrelated Melanocortin Agonist and Endogenous Antagonist, Agouti Protein" <i>The Journal of Biological Chemistry</i> , January 12, 2001, pp. 931-936, Vol. 276, No. 2.				
	R17	PERRY, W. L. et al. "A Transgenic Mouse Assay for Agouti Protein Activity" Genetics, May 1995, pp. 267-274, Vol. 140.				
	R18	PERRY, W. L. et al. "Coupled Site-Directed Mutagenesis/Transgenesis Identifies Important Functional Domains of the Mouse Agouti Protein" <i>Genetics</i> , September 1996, pp. 255-264, Vol. 144.				
	R19	QUILLAN, J. M. et al. "A Synthetic Human Agouti-Related Protein-(83-132)-NH ₂ Fragment is a Potent Inhibitor of Melanocortin Receptor Function" <i>FEBS Letters</i> , 1998, pp. 59-62, Vol. 428.				
	R20	SAWYER, T. K. et al. "4- Norleucine, 7-D-Phenylalanine-\$\Alpha \$-Melanocyte-Stimulating Hormone: A Highly Potent -\$\Alpha \$-Melanotropin with Ultralong Biological Activity" Biochemistry, October 1980, pp. 5754-5758, Vol. 77, No. 10.				
	R21	TOTA, M. R. et al. "Molecular Interaction of Agouti Protein and Agouti-Related Protein with Human Melanocortin Receptors" Biochemistry, 1999, pp. 897-904, Vol. 38.				
	R22	WILLARD, D. H. et al. "Agouti Structure and Function: Characterization of a Potent α-Melanocyte Stimulating Hormone Receptor Antagonist" <i>Biochemistry</i> , 1995, pp. 12341-12346, Vol. 34.				
	R23	YANG, Y-K. et al. "Functional Properties of an Agouti Signaling Protein Variant and Characteristics of its Cognate Radioligand" Am. J. Physiol Regulatory Integrative Comp. Physiol., 2001, pp. R1877-R1886, Vol. 281.				
	R23	YANG, Y-K. et al. "Molecular Determinants of Ligand Binding to the Human Melanocortin-4 Receptor" Biochemistry, 2000, pp. 14900-14911, Vol. 39.				
,,,, <u>-</u>	R25	YANG, Y-K. et al. "Characterization of Agouti-Related Protein Binding to Melanocortin Receptors" Molecular Endocrinology, 1999, pp. 148-155.				
	R26					

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